

L 16438-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-l/Pr-l/Ps-l/Pl-l RPL WW/JW/JFW/RM
ACCESSION NR: AP4044883 S/0020/64/157/006/1410/1412

AUTHOR: Lavrov, N. V. (Academician AN UzSSR); Petrenko, I. G.

TITLE: The mechanism of the reaction of methane conversion with carbon dioxide

SOURCE: AN SSSR. Doklady*, v. 157, no. 6, 1964, 1410-1412

TOPIC TAGS: methane carbon dioxide conversion, reaction mechanism, monoradical chain mechanism, methylene radical

ABSTRACT: Based on literature data and their investigations, the authors analysed the elementary reactions of the reaction of CH₄ with CO₂ and their heat effects. The following monoradical chain mechanism was suggested:

	ΔH_{298}^0	KCal/mol.	KCal/mol. E,
1. CH ₄ +H=CH ₃ +H ₂	-1,2	11,2	
2. CH ₃ +OCO=CH ₂ O+CO	30,2	38,7	
3. CH ₂ O=H ₂ CO+H	17,0	24,3	
4. H ₂ CO+H=HCO+H ₂	-27,2	4,7	
5. HCO=H+CO	34	37	
CH ₄ +CO ₂ =2CO+2H ₂	-58,8		

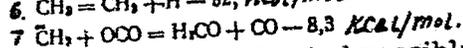
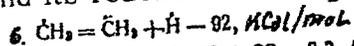
Card 1/2

L 16138-65

ACCESSION NR: AP4044883

2

According to this mechanism, reaction 1 is the link in the basic chain of the mono-radical chain; reaction 2, the formation of CO and the methoxyl radical, is the process rate determining reaction; and the heat effect of the overall reaction is in good agreement with the experimental value of 59.1 kcal/mol. The formation of the methylene biradical and its reaction with CO₂ was also indicated possible:



Other intermediate reactions were also indicated possible but insignificant due to their higher heat consumption. Orig. art. has: 11 equations

ASSOCIATION: None

SUBMITTED: 27Apr64

ENCL: 00

SUB CODE: GC

NO REF SOV: 006

OTHER: 002

Card 2/2

LAVROV, N.V., akademik; PETRENKO, I.G.

Mechanism of methane conversion by steam. Dokl. AN SSSR 158 no.3:645-
647 S '64. (MIRA 17:10)

1. AN UzSSR (for Lavrov).

L 32011-65 EPA/EWT(m)/EPA(s)-2/EFT(c)/EWP(j)/EPR Pc-L/Pr-L/Ps-L/Pt-L
ACCESSION NR: AP5005891 S/0020/65/160/003/0612

AUTHOR: Lavrov, N.V. (Academician AN UzSSR); Petrenko, I.G.

TITLE: The mechanism of methane combustion at elevated temperatures

42
0

SOURCE: AN SSSR. Doklady, v. 160, no. 3, 1965, 612-614

TOPIC TAGS: methane combustion, combustion mechanism, high temperature combustion, methane oxidation, formaldehyde oxidation

ABSTRACT: A radical chain mechanism for the oxidation of methane to carbon dioxide and water vapor at temperatures above 800C is proposed and calculated. Thermal effects and activation energies for the elemental reactions involved are

L 32011-65

ACCESSION NR: AP5005891

published values. Possible side reactions are also given. The endothermic reaction (26.1 kcal/mole) $\text{CH}_3 + \text{O}_2 = \text{CH}_3 + \overset{\cdot\cdot}{\text{O}}$ is proposed as the rate-limiting step. Possible additional elemental reactions are discussed and two

ASSOCIATION: none

SUBMITTED: 04Sep64

ENCL: 00

SUB CODE: OC, FP

NO REF SOV: 005

OTHER: 003

ATD PRESS: 3201

Card 2/2

LAVROV, N.V., akademik

Peculiarities of the mechanism of carbon combustion. Trudy
VMNIPodzemgaza no.13:3-6 '65. (MIRA 18:8)

1. Akademiya nauk UzSSR i Laboratoriya geotekhnologicheskaya
Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy
gazifikatsii ugley.

LAVROV, N.V., akademik

Some physicochemical regularities in the combustion of fuel. Dokl.
AN SSSR 164 no.5:1111-1114 0 '65. (MIRA 18:10)

1. Vsesoyuznyy nauchn. issledovatel'skiy institut ispol'zovaniya
gaza v narodnom khozyaystve, podzemnogo khraneniya nefi, nefte-
produktov i szhizhennykh gazov i AN UzSSR.

L 18028-66 EWT(1)

ACC NR: AP6003249

SOURCE CODE: UR/0020/65/165/006/1317/1319

AUTHOR: Lavrov, N. V., Academician AN UzSSR; Khaustovich, G. P.

40
B

ORG: none

TITLE: Role of thermal dissociation in the reaction of carbon and carbon dioxide and oxygen

SOURCE: AN SSSR. Doklady, v. 165, no. 6, 1965, 1317-1319

TOPIC TAGS: carbon, oxygen, carbon dioxide, thermal decomposition

ABSTRACT: It is shown that in the ^{21, 44, 55}1000 - 3500K temperature range the rate of the reaction between carbon and carbon dioxide is almost entirely determined by the rate at which carbon reacts with molecular and atomic oxygen formed as a result of thermal dissociation of CO₂. Calculations indicate that this statement is valid only when the rates of the reactions C + CO₂ and C + O₂ are proportional to the product of the reaction rate constant by the concentration of the corresponding gaseous reagent. This condition is met at low temperatures or at sufficiently high ones. It is logical to assume further that the

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UDC: 541.115

L 18028-66

ACC NR: AP6003249

process is determined only by the reaction of carbon with atomic oxygen, but a definite conclusion in this regard requires experimental data on the $C + O$ reaction. The activation energy of the thermal dissociation of CO_2 is 87 kcal/mole, i.e., the same as the activation energy of the reduction of CO_2 by carbon. Hence, at low and high temperatures this coincidence is justified, but in the intermediate temperature range, i.e., when the role of the $C + CO_2$ reaction is substantial, this can be explained only by assuming that in this case the initial stage of dissociation of CO_2 is the rate-determining step. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: 03Apr65/ ORIG REF: 004/ OTH REF: 001

Card 2/2
vmb

L 47298-66

ACC NR: AP6029419 (A) SOURCE CODE: UR/0317/66/000/006/0050/0053

AUTHOR: Lavrov, O. (Lieutenant Colonel; Engineer)

ORG: none

TITLE: New GAZ-66, ZIL-131, and URAL-375 cargo trucks

SOURCE: Tekhnika i vooruzheniye, no. 6, 1966, 50-53

TOPIC TAGS: truck, vehicle suspension system, hydropneumatic brake, brake system/GAZ-66 truck, ZIL-131 truck, URAL-375 truck

ABSTRACT: The author gives some information on the new GAZ-66, ZIL-131, and URAL-375 trucks. These trucks are equipped with powerful engines, hydropneumatic brakes, improved suspension systems, and systems for adjusting the air pressure in tires. These and a number of other design solutions make for increased maneuverability, cross-country ability, riding smoothness, part longevity, and overall reliability. However, the remarkable qualities of the new trucks can be fully utilized by proper organization of maintenance. A diagram showing the pneumohydraulic-drive brake mechanism is given in the original article. The operation of the brakes is described. Orig. art. has:

1 figure.

[NT]

Card 1/1 SUB CODE: 13/ SUBM DATE: none/

LAVROV, Nikolay Valentinovich

[Advanced methods in sericulture] Peredovye metody raboty v
shelkovodstve. Moskva, Gos.izd-vo selkhoz lit-ry, 1958. 63 p.
(Sericulture) (MIRA 12:3)

LAVROV, Nikolay Valentinovich; GORNIK, M.V., red.; PECHENKIN, I.V.,
tekh.red.

[Apparatus for determining the sex of cocoons] Apparat OFK.
Moskva, Izd-vo M-va sel'.khoz.SSSR, 1959. 7 fold.p.

(MIRA 13:7)

1. Vystavka dostizheniy narodnogo khozyaystva SSSR.
(Sericulture)

ZAKHAROV, Ye.I., prof.; LAVROV, O.O., aspirant

Enteroplasty with the small intestine in the treatment of the dumping syndrome following gastrectomy and Bilioth II sub-total gastric resection. Khirurgiia no.8:45-49 Ag '61.

(MIRA 15:5)

1. Iz gosspital'noy khirurgicheskoy kliniki (zav. = prof. Ye.I. Zakharov) lechebnogo fakul'teta Krymskogo meditsinskogo instituta.
(STOMACH SURGERY) (INTESTINES TRANSPLANTATION)

ZAKHAROV, Ye. I., prof; LAVROV, O. O., aspirant

Plastic surgery using the small intestine in repeated interventions
for diseases of the stomach surgically treated previously. Nov.
khir. arkh. no.2:43-47 '62. (MIRA 15:2)

1. Gospital'naya khirurgicheskaya klinika (zav. - prof. Ye. I.
Zakharov) Lechebnogo fakul'teta Krymskogo meditsinskogo instituta.

(STOMACH—SURGERY) (INTESTINES—TRANSPLANTATION)

LAVROV, O. P., FEYNSTEYN, F. E. and SKURKOVICH, S. V.
(of the Central Institute of Hematology and Blood Transfusion of the Order of Lenin;
Dir., Corresponding Member of the AMN of the USSR, Prof. A. A. Bagdasarov, of the
Ministry of Health of the USSR)

"Changes of Hemocytostimuline in the System in Treating Iron-Deficient Anemias", *Prob.*
Hematol. & Blood Transfus., No. 1, 1956
abstract--B-99405

L 13373-63

EPR/BDS/EWT(1)/ES(v)/ES(w)-2 AEDC/AFTIC/ASD/SSD Ps-4/

Pe-4/Pab-4 WH

ACCESSION NR: AP3002736

S/0120/63/000/003/0131/0133

AUTHOR: Lavrov, O. V.; Fedorov, N. D.; Khaldin, N. N.

78

TITLE: Quick-acting¹ vacuum valve 2

SOURCE: Pribery* i tekhnika eksperimenta, no.3, 1963, 131-133

TOPIC TAGS: vacuum valve

ABSTRACT: A quick-acting vacuum slide valve for a pulse-type ion source¹ with a low (10^{-3} cm³ per pulse) gas consumption is described. A 2-seal, 2-electromagnet design is used; the source aperture is open when the shutter slides between its extreme positions. Five microseconds elapse from the start of opening to the complete shutting of the 16-mm hole. Prospects of a better design, with one electromagnet, are indicated. Construction sketches are presented. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 01Aug62

DATE ACQ: 12Jul63

ENCL: 00

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 1/1

LAVROV, P.

Longevity of structural elements. Stroitel' 8 no.6:5-6 Je '62.
(MIRA 15:7)

(Building materials--Frcst damage)

LAVROV, P.; BOGAYEVSKIY, B.

Constructing a skip pit for the new blast furnace of the
"Azovstal'" Plant. Proca. stroi. i inzh. soor. 2 no. 1:8-9
Ja '60. (MIRA 14:1)

1. Nachal'nik tekhnicheskogo otdela tresta "Azovstal'stroy"
(for Lavrov). 2. Glavnyy inzhener Stroitel'no-montazhnogo
uchastka "Prokatstroya" (for Bogayevskiy).
(Zhdanov--Blast furnaces)

KIM, M.; LAVROV, P.; KOROTKOV, Yu.; KOLOMEYTSEV, L.

File foundations in permafrost. Stroitel' 8 no.11:3-4, 4 of cover
N '62. (MIRA 16:1)

(Piling (Civil engineering)) (Frozen ground)

LAVROV, P.A. , inzh. (Noril'sk, Krasnoyarskogo kraya)

Conducting earthwork operations in the Far North. Prom. stroi.
38 no.9:41-43 '60. (MIRA 13:9)

(Noril'sk--Earthwork)

LAVROV, P.A.; STREL'S'KIY, V.I., dotsent, otvetstvennyy redaktör

[The workers' movement in the Ukraine during 1913-1914]
Rabochee dvizhenie na Ukraine v 1913-1914 gg. Kiev, Izd-vo
Kievskogo gos. univ. im. T.G. Shevchenko, 1957. 121 p.
(MLRA 10:5)

(Ukraine--Labor and laboring classes)

LAVROV, P.A.

Industrial and municipal piping under the conditions of the Far
North. Sbor.nauch.rab.AKKH no.12:13-19 '62. (MIRA 16:4)
(Russia, Northern--Pipelines) (Frozen ground)

LAVROV, P. I.

"Investigation of Some Questions of Circulation in Steam Boilers." Card
Tech Sci, Inst of Heat Power Engineering, Acad Sci Ukrainian SSR, Kiev, 1954.
(KL, No 14, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

LAVROV, P.I.

"Solution for Making a Plan for the Processing of Semi-Coke into Fine Lignite and Peat with the Aid of a Solid Heat Carrier," paper submitted for the 1st National Congress, Czechoslovak Scientific Technical Society for Fuel Utilization. Karlovy Vary. Czechoslovakia, 12-17 May 58.

LAVROV, P.I.

Studying the heating process by the fuel-engineering flow sheet of
the Heat-Power Institute of the Ukrainian S.S.R. Trudy Inst. tepl.
AN URSR no.15:72-80 '58. (MIRA 11:10)
(Heat engineering)

LAVROV, P.I.

History of the installation and development of water-tube
boilers on river steamers. Har.z ist.tekh. no.5:37-53 '59.
(MIRA 13:5)

(Boilers, Marine)

LAVROV, P.I., kand. tekhn. nauk

Systems using solid thermal carriers for the industrial testing of the thermal processing of Ukrainian brown coal and milled peat. Kompl. vyk. pal.-energ. res. Ukr. no.1:127-138 '59. (MIRA 16:7)

1. Institut teploenergetiki AN UkrSSR.
(Ukraine--Lignite) (Ukraine--Peat)

KREMNEV, Oleg Aleksandrovich; **SATANOVSKIY**, Abram Lazarevich; **LAVROV**, P.I.,
kand. tekhn. nauk, retsenzent; **CHISTYAKOVA**, L.G., inzh., red.;
GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Air and evaporative cooling of equipment] *Vozdushno-vodoisparitel'-
noe okhlazhdenie oborudovaniia*. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1961. 179 p. (MIRA 14:9)
(Cooling)

LAVROV, P. I.

"Some Problems of Fire Modelling of Boiler Furnaces."

Report submitted for the Conference on Heat and Mass Transfer,
Minsk, BSSR, June 1961.

KOCHEREZHKO, A.N. [Kocherezhko, O.N.]; LAVORV, P.I.

Studying the effect of blow air preheating on the efficiency of
burning anthracite fines. Zbir.prats' Inst.tepl.AN URSR no.23:
23-36 '61.

(MIRA 15:2)

(Boilers--Firing)
(Anthracite coal)

SHCHEGOLEV, German Mikhaylovich; YASHIN, Aleksandr Viktorovich;
LAVROV, Petr Ivanovich, kand. tekhn. nauk, otv. red.;
PECHKOVSKAYA, O.M., red.; DAKHNO, Yu.M., tekhn. red.

[Low temperature ashing of fuels]Nizkotemperaturnoe ozo-
lenie topliv. Kiev, Izd-vo Akad. nauk USSR, 1962. 49 p.
(MIRA 15:10)

(Ash (Technology))

SHVETS, I.T., akademik, otv. red.; DAL', V.I., doktor tekhn. nauk, red.; SHCHEGOLEV, G.M., kand. tekhn. nauk, zam. otv. red.; OSTROVSKIY, S.B., red.; LAVROV, P.I., kand. tekhn. nauk, red.; LANDSMAN, S.U., kand. tekhn. nauk, red.; KUZNETSOV, V.I., kand. khim. nauk, red.; SUSHON, S.P., inzh., red. DAKHNO, Yu.B., tekhn. red.

[Complete utilization of Ukrainian solid fuels] Kompleksnoe izpol'zovanie tverdykh topliv Ukrainy. Kiev, Izd-vo AN USSR, 1962. 287 p. (MIRA 15:11)

1. Akademiya nauk URSR, Kiev. Rada po vyvchenniu produktyvnykh syl URSR.
2. Akademiya nauk Ukr.SSR (for Shvets).
3. Nachal'nik otdela toplivnoy promyshlennosti Gosudarstvennogo planovogo komiteta Soveta Ministrov Ukr. SSR (for Ostrovskiy).
4. Institut teploenergetiki Akademii nauk Ukr.SSR (for Shchegolev, Sushon).

(Ukraine---Fuel)

KASHPROVSKIY, S.Ye.; KOCHEREZHKO, A.N.; LAVROV, P.I.

Concerning the use of a relative increment technique in
operating boiler systems. Energ.i elektrotekh.prom. no.4:9-13
O-D '62. (MIRA 16:2)

(Boilers)

LAVROV, P.I.

Some problems of the flame modeling of combustion processes.
Zbir. prats' Inst. tepl. AN URSR no.25:25-33 '62. (MIRA 17:1)

LAVROV, P.I.; SAVVAKIN, G.I. [Savvakin, H.I.]

High-regularity feeder for finely ground powders. Zbir. prats'
Inst. tepl. AN URSS no.25:73-78 '62. (MIRA 17:1)

.....
LAVROV, P. I. (Institute of technical thermal physics of Academy of Sciences of Ukrainian SSR)

"Investigation of processes of burning by method of fire modeling"

Report presented at the Section on Physics of Combustion, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651. 19 May 1964.

LAVROV, P.I.

Approximate simulation of firing processes in large boiler
systems. Energ. i elektrotekh. prom. no. 3:44-49 J1-S '62.
(MIRA 18:11)

1. Institut teploenergetiki AN UkrSSR.

L 25033-65 EPA/EPA(S)-2/EWT(m)/EPF(c)/EPR Pr-4/Ps-4/Pt-10 WW/JW/MJK

ACCESSION NR: AT5004223

S/0000/64/000/000/0170/0178

AUTHOR: Lavrov, P. I.

TITLE: Flame modelling as a method for studying the aerodynamics of combustion processes

SOURCE: AN UkrSSR. Institut tekhnicheskoy teplofiziki. Teplofizika i teplotekhnika (Thermophysics and heat engineering). Kiev, Naukova dumka, 1964, 170-176

TOPIC TAGS: combustion, combustion chamber, flame structure, combustion chamber model, burner

ABSTRACT: Methods for studying combustion processes on models and conditions required for scaling-up results to full-sized combustion chambers and burners are briefly discussed. It is recommended that the gases and

$$\frac{\Sigma(mw)}{V}$$

be identical in the model and the full-sized chamber (mw = momentum, V = chamber volume). An approximate modelling procedure developed by the Institute of Power Engineering, Ukrainian SSR, is based on the
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determination of velocity, temperature, and concentration fields in the model. Velocity fields were determined by black and white photography of injected magnesium particles and by color photography of traces made by HCl-wetted copper rods placed at different points of the chamber model. Velocity, temperature, and oxygen concentration fields determined in a natural-gas-operated semiconfined combustion chamber are given. The optimum geometry of a TKZ gas burner was determined by similar experiments. The method permits satisfactory determination of the flame structure and is recommended for developing new types of combustion chambers of burners. Orig. art. has: 4 figures. [PV]

ASSOCIATION: Institut tekhnicheskoy teplofiziki AN UkrSSR (Institute of Technical Thermophysics, AN UkrSSR)

SUBMITTED: 10Aug64

ENCL: 00

SUB CODE: FP, VE

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3100

Card 2/2

L 26506-66 EWP(m)/EWT(l)/EWT(m)/ETC(m)-6/T/EWA(d)/EWA(l)/EWP(f) WWW/JW/WE/GS

ACC NR: AT6008146

UR/0000/65/000/000/0056/0063

AUTHOR: Lavrov, P.I.; Klizenko, Yu.G.; Vishnyak, B.G.

ORG: None

TITLE: Comparative investigation of mixture generating processes in isothermal and non-isothermal modeling of flows in combustion chambers

SOURCE: AN UkrSSR. Techeniya zhidkostey i gazov (flows of liquids and gases) Kiev, Naukova dumka, 1965, 56-63

TOPIC TAGS: combustion, combustion chamber, isothermal flow, gas jet

ABSTRACT: This paper is an account of combustion chamber modeling for a study of the mixing processes. Interest in this topic was generated by existing differences of opinion as to the relative merits of isothermal and non-isothermal modeling and by the importance of the mixing process for efficient operation of thermal systems. The experimental installation was a 1/15 scale model of the boiler aggregate PK-41, and had 4 turbulent burners installed in each of the front and rear chamber walls. The mixing of the air-gas jets from the burners was explored by an analysis of the tracer gas distribution in the chamber. Sampling was done by a probing tube with an internal diameter of 3mm. Methane (for isothermic) and helium (for non-isothermic experiments) were used as

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ACC NR: AT6008146

tracer gases. For non-isothermic research, the probe was artificially cooled. Parameters, and a drawing of the model boiler installation are given. The distributions of tracer gases are shown and discussed, together with the results of thermal field and concentration studies. It is concluded that in combustion chambers working at thermal loads of the order of $4 \cdot 10^6$ k.kal/(m³.hour) and using opposite burner groups, the mixing process is determined mainly by the interdependence of the gas jets and the chamber design. Isothermal modeling of gas flow in such combustion chambers has possibilities for the evaluation of mixing processes. Orig. art. has: 5 figures, 1 table.

SUB CODE: 21,20/ SUBM DATE: 27Apr64/ OTH REF: 003

Card 2/2 CC

LAVROV, P.N.

LAVROV, P.N., inzhener; BOGAYEVSKIY, B.A., inzhener

Fastening the rails under loading cranes to foundations. Stroi.
prom. 33 no. 6:44-45 Je'55. (MIRA 8:10)
(Cranes, derricks, etc.)

LAVROV, P. P. (Engr.)

"Determination of Some Characteristics in Dlat-Roll Cold Rolling,
Rolling Mills; Studies, Calculation, Design and Operation, No. 8,
Moscow, Mashgiz, 1956. 258 p. (p. 201)

Articles by Anisifirov, V. M.; Korolev, A.A.; Morozov, B.A.; Polezhayev,
A.A., and Lavrov, A.A. give the results of research in the fields of dura-
bility and efficiency of metallurgical machinery. There are 57 references
of which 52 are Soviet, 3 USA, 2 German.

LAVROV, P.P.

SOV/124-58-4-4566

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 129 (USSR)

AUTHOR: Lavrov, P. P.

TITLE: Determination of Certain Parameters Pertaining to Cold Rolling Between Smooth Rolls (Opredeleniye nekotorykh parametrov pri kholodnoy prokatke v gladkikh valkakh)

PERIODICAL: V sb.: Prokatn. stany. Nr 8. Moscow, Mashgiz, 1956, pp 201-216

ABSTRACT: The article presents an analysis of experimental graphs obtained by A. A. Korolev which show the unit pressures developed during rolling [Nekotoryye issledovaniya deformatsii metalla pri prokatke (Certain Investigations into the Deformation of the Metals During Rolling.) Mashgiz, 1953.]. Certain assumptions are made as follows: The areas under the curves are replaced by the equivalent areas of rectangles and triangles; the values of P_{max} corresponding to the vertex of a triangle are determined from the Siebel-Zelikov formula for the case of metal deformation between flat plates; the thickness of the rolled strip is assumed to be equal to the mean arithmetic value $h_{mean} = 1/2(h_0 + h_1)$. A formula is given for the mean unit

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SOV/124-58-4-4566

Determination of Certain Parameters (cont)

pressure p_{mean} as a function of p_{max} ; numerical coefficients are introduced into this formula on the basis of the analysis of A. A. Korolev's graphs. The article presents a nomograph for a graphical determination of the contact length l_c between the metal and the rolls with due account for the elastic flattening of the rolls. Simultaneous solution of the equations for p_{mean} and l_c permits an assessment of the "limit of the rolling reducibility of strip thickness". However, the assumptions in the analysis, as mentioned above, impair the value and the practical significance of the results obtained.

Reviewer's name not given

1. Metals--Processing
2. Pressure--Development
3. Pressure--Determination
4. Rolling mills--Applications
5. Mathematics

Card 2/2

MEYEROVICH, I.M., kand. tekhn. nauk; LAVROV, P.P., inzh.

Twisting moments in pipe rolling on continuous, seven-stand mills.
Obr. met. davl. no.5:165-174 '59. (MIRA 13:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i
mashinostroyeniya. (Rolling mills)

MATVEYEV, Yu.M., doktor tekhn. nauk; LAVROV, P.P., kand. tekhn. nauk

Effect of supporting and pulling on the process of tube
rolling on long mandrels. Stal' 24 no.1:58-62 Ja '64.

(MIRA 17:2)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu
metallurgicheskikh zavodov i Vsesoyuznyy nauchno-issledovatel'-
skiy i proyektno-konstruktorskiy institut metallurgicheskogo
mashinostroyeniya.

VAKIN, Ya.L., doktor tekhn. nauk; GUMAYEV, G.I., kono. tekhn. nauka;
SAVKIN, I.P., inzh.; BRUKAN, V.M., inzh.; CHERNYY, V.N., inzh.;
LAVROV, F.F., inzh.; KOLPOVSKIY, N.M., inzh.

Gravimetric method of a continuous seven-stand mill with two
supplementary stands. profar. irub no.12:19-24 '64.

(MIRA 17011)

RASIN, Boris Isaakovich; LAVROV, R.A., otv. red.; TAKOYEV, K.F.,
red.; MARKOCH, K.G., tekh. red.

[V.N.Podbel'skii a talented organizer of Soviet telecommuni-
cation] Talentlivyi organizator sotsialisticheskoi sviazi
V.N.Podbel'skii. Moskva, Sviaz'izdat, 1962. 126 p.
(MIRA 16:3)

(Telecommunication)
(Podbel'skii, Vadim Nikolaevich, 1887-1920)

LAVROV, S.B.

Interesting work on economic geography ("Political and economic
geography" [in German] by K. Eggerth and others. Reviewed by
S.B. Lavrov. Vest. LGU 12 no. 24:180-181 '57. (MIRA 11:5)
(Geography, Economic)
(Eggerth, K.)

NIKOLAYEVA, N.V.; AL'TMAN, L.P.; CHERTOV, L.G.; KUZNETSOV, B.B.; LAVROV, S.B.;
LAGUTINA, Ye.I.

V.M. Chetyrkin; obituary. Vest.LGU 13 no.24:121-122 '58.
(MIRA 12:4)
(Chetyrkin, Vladimir Mikhailovich, 1892-1958)

LAVROV, S.B.

In the German Democratic Republic. Geog. v shkole 21 no.5:
16-23 S-0 '58. (MIRA 11:10)
(Germany, East--Description and travel)

LAVROV, S.B.

Bavaria as an economic region of the German Federal Republic.
Vest.LGU 14 no.6:83-94 '59. (MIRA 12:6)
(Germany, West--Economic geography)

LAVROV, S.B.

Geography of revanche ("Countries and peoples." Part 1: Germany
and its neighbors to the south and east. Reviewed by S.B. Lavrov).
Vest. LGU 16 no. 6:154-155 '61. (MIRA 14:4)
(Germany, West—Geography)

LAVROV, S.B.

Industrial regionalization of the German Democratic Republic in the
seven-year plan; 1959-1965. Vest.IGU 16 no.12:103-115. '61.
(MIRA 14:6)

(Germany, East--Industry)

LAVROV, Sergey Borisovich; CHOCHIA, Nataliya Sergeyevna; PETROVSKAYA,
T.L., red.; ZHUKOVA, Ye.G., tekhn. red.

[Economic geography of the German Democratic Republic] Ekonomicheskaia geografiia GDR; uchebnoe posobie. Leningrad, Izd-vo Leningr. univ., 1962. 80 p. (MIRA 16:3)
(Germany, East—Economic geography)

LAVROV, S. B.

Program of the CPSU and some problems relative to the teaching
of economic geography. Izv. Vses. geog. ob-va 94 no.6:496-499
N-D '62. (MIRA 16:1)

(Geography, Economic)

LAVROV, S.B.

"The Common market" and the economic geography of the Federal
Republic of Germany. Vest. 198 20:73-83 '85.

(MIRA 18:4)

LAVROV, S.B.

Geography of the gas economy of the German Democratic Republic.
Vest. IGU 20 no.18 '65 Seria geologii i geografii no.3:72-79

(REF. 18:10)

AL'BRUT, M.I.; AGAFONOV, N.T.; LAVROV, S.B.; AFONSKAYA, M.O.;
KONSTANTINOV, O.A.

Reviews. Izv. Vses. geog. ob-va 97 no.6:554-560 N-D '65.

(MIRA 19:1)

LAVROV, Sergey Borisovich

[Netherlands] Niderlandy. Moskva, Mysl', 1964. 70 p.
(MIRA 18:12)

VLASENKO, A.V.; LAVROV, S.M.

Stone rings in the upper Dzhida Valley and conditions governing
their formation. Biul. Kon. chetv. per. no.30:159-161 '65.
(MIRA 19:2)

LAVROV, S.P.

SHOSTAKOVSKIY, M.P.; LAVROV, S.P.

The interaction of ethylene oxide with silicon tetrachloride and ethyltrichlorosilane. Dokl. AN SSSR 114 no.1:128-130 My '57. (MLRA 10:7)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR. Predstavleno akademikom I.N. Nazarovym.
(Silicon chlorides) (Silane) (Ethylene oxide)

BARSOV, Nikolay Nikolayevich, dotsent, kand.geograf.nauk; BONIFAT'YEVA, Lidiya Ivanovna, dotsent, kand.geograf.nauk; BURENKO, Sergey Fedorovich, dotsent, kand.geograf.nauk; GITLITS, Semen Aleksandro- vich, dotsent, kand.ekonom.nauk; GUREVICH, Priam Vladimirovich, prof.; DARINSKIY, Anatoliy Viktorovich, dotsent, kand.geograf.nauk; DOLININ, Aleksey Arkad'yevich, dotsent, kand.geograf.nauk; DOROSHKEVICH, Lyudmila Ivanovna, dotsent, kand.geograf.nauk; YEFIMOVA, Yelena Se- menovna, kand.geograf.nauk; LAVROV, Sergey Borisovich, dotsent, kand. geograf.nauk; LEDOVSKIKH, Stepan Ivanovich, dotsent, kand.geograf. nauk; NEVEL'SHTEYN, Grigoriy Solomonovich, dotsent, kand.geograf. nauk; NIKOLAYEVA, Nadezhda Vasil'yevna, dotsent, kand.geograf.nauk; OGANESOV, Vladimir Artem'yevich, kand.geograf.nauk; PINKHENSON, Dmitriy Moiseyevich, dotsent, kand.geograf.nauk; POSPELOVA, Nata- liya Georgiyevna, prof., doktor ekonom.nauk; SEMEVSKIY, Boris Nikola- yevich, prof., doktor geograf.nauk; SUTYAGIN, Pavel Grigor'yevich, dotsent, kand.geograf.nauk; SHTEYN, Viktor Moritsovich, prof., doktor ekonom.nauk; YEROFEYEV, I.A., red.; SMIRNOVA, N.P., red.; TYUTYUNNIK, S.G., red.kart; BORISKINA, V.I., red.kart; KOZLOVSKAYA, M.D., tekhn.red.

[Economic geography of foreign countries; student manual] *Ekonomi- cheskaya geografiya zarubezhnykh stran; posobie dlia studentov.* Moskva, Gos.uchebno-pedagog.izd-vo M-vs prosv.RSFSR, 1960. 702 p. # maps (MIRA 13:12)

(Geography, Economic)

9.7/40

37922
S/044/62/000/003/085/092
C111/C333

AUTHOR: Lavrov, S.S.

TITLE: On the economy of the memory in closed operator circuits

PERIODICAL: Referativnyy zhurnal., Matematika, no. 3, 1962, 67,
abstract 3 V 411. ("Zh. vychisl. matem. i matem. fiz.", 1961,
1, no. 4, 687 - 701)

TEXT: Considered are operator circuits in which it is prescribed for every operator which variables it elaborates and which it uses, as well as which operations can be carried out directly after it. A class of closed operator circuits is distinguished which is characterized by the absence of contradictory paths (on each path of the circuit only those variables are used which have been formerly elaborated). All possible variations of the notations of different variables at the inputs and outputs of the single operators are considered. The notion of the equivalence of notation systems (e.n.s.) is introduced. A number of properties of the e.n.s. is proved. For closed operator circuits the e.n.s. is a symmetric and transitive property. A theorem on the necessary and sufficient conditions for the e.n.s. is proved. For scalar variables
Card 1/3

On the economy of the memory ...

S/044/62/000/003/085/092
C111/C333

the problem of the economy of the memory is reduced to the determination of a notation system which is equivalent to the initial system and contains the minimum number of different notations. Then to each notation there is assigned a cell of the memory. The effective ranges of a given variable are sets of inputs and outputs of the operators such that this variable for arbitrary equivalent variations of variables within each effective range must be equally denoted, while in different effective ranges it can be denoted differently. An algorithm described in the language АЛГОЛ-60 (ALGOL-60) for determining the effective ranges in closed operator circuits is given. The same notation can correspond to two disjoint effective ranges of different variables. For every operator circuit an incompatibility graph can be constructed, the vertices of which denote the effective ranges of the variables, where two vertices are connected by an edge, if the corresponding effective ranges intersect. To the problem of the economy of the memory there corresponds the problem of painting the vertices of this graph with a minimum number of colors.

Card 2/3

On the economy of the memory ...

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C111/C333

All well-known methods of minimum painting of an arbitrary graph
require the revision of a large number of different variants.

[Abstracter's note : Complete translation.]

Card 3/3

LAVROV, S.S. (Moskva)

Approximation of functions of several variables using the method
of least squares. Zhur. vych. mat. i mat. fiz. 4 no.3:547-550
My-Je '64. (MIRA 17:6)

LAVROV, Svyatoslav Sergeyevich; GORYACHAYA, M.M., red.

[Universal programming language; algol 60]Universal'nyi
iazyk programmirovaniia; algol 60. Moskva, Nauka, 1964.
171 p. (MIRA 18:2)

ACCESSION NR: AP4045714

S/0208/64/004/005/0905/0911

AUTHOR: Lavrov, S. S. (Moscow)

TITLE: Use of barycentric coordinates for solving numerical problems

SOURCE: Zhurnal vyshislitel'noy matematiki i matematicheskoy fiziki, v. 4, no. 5, 1964, 905-911

TOPIC TAGS: numerical analysis, interpolation, nonlinear equations

ABSTRACT: Using barycentric coordinates, the author treats the problem of constructing an interpolating polynomial for a function for a special choice of interpolation nodes, the problem of solving a system of nonlinear algebraic equations, and the problem of finding extrema of functions of several variables. His numerical techniques appear to be minor variations of classical methods. Orig. art. has: 28 formulas.

ASSOCIATION: none

SUBMITTED: 12Nov63

ENCL: 00

SUB CODE: MA

NO REF SOV: 001

OTHER: 004

Card 1/1

L 36829-66 EWT(d)/EWP(1) IJP(c) GG/BB

ACC NR: AP6017929

SOURCE CODE: UR/0378/66/000/002/0057/0102

AUTHOR: Korolev, M. A.; Kuz'min K. S.; Lavrov, S. S.; Letichevskiy, A. A.;
Stolvarov, G. K.; Shura-Bura, M. R.

55
52
B

ORG: None

TITLE: Report on the ALGEK algorithmic language 160

SOURCE: Kibernetika, no. 2, 1966, 57-102

TOPIC TAGS: algorithmic language, economics, information processing, computer application, machine translation

ABSTRACT: This paper presents a description of an algorithmic language termed ALGEK (algorithmic language for economic problems). It extensively uses the data on the ALGOL-60 language, the SUBSET ALGOL-60 (IFIP) language, and the input-output procedures developed for ALGOL. The present work also makes use of the ideas of COBOL-60 language and the input-output procedures developed elsewhere (D. E. Knuth, L. L. Bumgarner, P. Z. Ingerman, J. H. Werner, D. E. Hamilton, M. P. Lietzke, D. T. Ross, A Proposal for Input - Output Conventions in Algol-60 (A Report of the Subcommittee on ALGOL of the ACM Programming Languages Committee). Communications of the ACM, V.7, N 5, May 1964.) The proposed language may be utilized for the composition of pro-

Card 1/2

UDC: 681.142.001:330.115

L 36829-66

ACC NR: AP6017929

3

grams for some typical problems in the processing of economic information and makes it possible to start the development of translators. The preliminary versions of the language were discussed at several conferences and seminars. The draft of the language was sent out to several organizations. The present publication has been approved by the Group of Algorithmic Languages for Processing Economic Information attached to the Commission for Multilateral Cooperation Between Academies of Sciences of Socialist Countries on the Problem of "Scientific Problems in Computing Technology" (Gruppa algoritmicheskikh yazykov po pererabotke ekonomicheskoy informatsii (GAYaPEY) pri komissii mnogostoronnego sotrudnichestva mezhdru akademiymi nauk sotsialisticheskikh stran po probleme "Nauchnyye voprosy vycheslitel'noy tekhniki") and is being recommended for a description of economic problems and for the creation of translators in the cooperating countries. GAYaPEY recommends that the authors of the language perform work on the creation of an input-output apparatus and retains the right to insert corrections into the language. The following are treated in great detail: the structure of the language; fundamental symbols, identifiers, digits, quotations, and fundamental concepts; expressions; and operators. Comrades Yu. Ya. Bazilevskiy, M. N. Yefimova, and A. S. Frolov rendered a great deal of assistance in the work, and the authors express their gratitude to them. Orig. art. has: 9 tables and 3 figures.

SUB CODE: 05/ SUBM DATE: 04Dec65/ ORIG REF: 000/ OTH REF: 007

m
Card 2/2

KNYAZEVA, L.D.; LAVROV, S.V.; DUBNYAKOVA, A.M.; LARINA, T.A.

Clinical course of hemorrhagic fever with renal syndrome; based on data on the 1956-1957 outbreak in the Yaroslavl Province. Sov. med. 24 no. 5:110-115 My '60. (MIRA 13:10)

1. Iz kliniki virusnykh zabolevaniy (zav. - prof. N.V. Sergeev) Instituta virusologii (dir. - prof. P.N. Kosyakov) AMN SSSR i Moskovskoy infektsionnoy bol'nitsy No. 2 (glavnyy vrach A.M. Pyl'tsova).

(YAROSLAVL PROVINCE---EPIDEMIC HEMORRHAGIC FEVER)

OBROSOVA, -SEROVA, N.P. LAVROV, S.V.

"Influence of growth conditions on biological properties of influenza A2 virus."

Report submitted to the Intl. Congress for Microbiology
Montreal, Canada 19-25 Aug 1962

LAVROV, V., agronom

New variety of oats; L'govskii 1026. Nauka i pered.op.v sel'khoz.
9 no.1:48 Ja '59. (MIRA 13:3)
(Oats--Varieties)

LAVROV, V., starshiy nauchnyy sotrudnik; POZNYAK, I., inzh.

Causes of ice formation in ice boxes. Mor. flot 23 no.6:21-22
Je '63. (MIRA 16:9)

1. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut
(for Lavrov). 2. Laboratoriya l'da Arkticheskogo i Antarkticheskogo
nauchno-issledovatel'skogo instituta (for Poznyak).
(Marine engines--Cooling) (Ice crystals)

YEROFEYEV, P., geolog morya; LAVROV, V., geolog morya

Far from the native shores. Sov. foto 19 no.12:66-70 D '59.
(MIRA 13:3)

1. Nauchnoye sudno "Mikhail Lomonosov".
(Oceanographic research)

LAVROV, V.

Forty-five kilometer per hour with the "Moskva" motor. Za rul. 19
no.4:25 Ap '61. (MIRA 14:7)

1. Champion Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i
flotu vo vodno-motornomu sportu.
(Motorboats--Gasoline engines)

LAVROV, V.

"Loans as a tool used by capitalist powers to enslave China"
by B.G.Boldyrev. Reviewed by V.Lavrov. Fin.SSSR 37 no.3:
89-92 Nr '63. (MIRA 16:4)
(China--Loans, Foreign) (Boldyrev, B.G.)

LAVROV, V.A.

Textile machinery

United efforts of repair men and technologists., Tekst. prom., no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified

LAVROV, V.A.

Development of the cotton industry of the Ivanovo Province
during the fifth five-year plan. Tekst.prom. 14 no.7:4-7 J1 '54.
(MLRA 7:8)

1. Zamestitel' nachal'nika - glavnyy inzhener Glavivkhlopproma.
(Ivanovo Province--Cotton manufacture) (Cotton manufacture--
Ivanovo Province)

LAVROV, V.A., assistant

Treating chronic osteomyelitis of the jaw with preserved cattle peritoneum. Stomatologia 37 no.1:56 Ja-F '58. (MIRA 11:3)

1. Iz kliniki gospiatal'noy khirurgii (zav. - prof. P.P.Khokhlov) Karagandinskogo gosudarstvennogo meditsinskogo instituta (dir. - dotsent P.M.Pospelov)
(JAWS--SURGERY) (PERITONEUM)

LAVROV, V.A.

Geography field trip to a peat bog with students of the fifth grade. Geog. v shkole 22 no.2:58-60 Mr-Apr '59. (MIRA 12:6)

1. 13-ya shkola, g.Kalinina.

(Geography--Study and teaching)
(Tsentral'nyy (Kalinin Province)--Peat bogs)

KOCHERGIN, P.G. (Kursk); YERMOLAYEV, A.D., (Ul'yanovsk); PASTEUSOVICH,
E.L. (Leningrad); MOZZHELIN, A.I.; LAVROV, V.A.; ZIMINA, A.

Discussion of new geography programs. Geog.v shkole 23 no.1:
63-74 Ja-F '60. (MIRA 13:5)

1. 176-ya shkola rabochey molodezhi Mpskvy (for Mozzhelin).
2. 7-ya shkola rabochey molodezhi Kalinina (for Lavrov).
(Geography--Study and teaching)

LAVROV, V. A.

Cand Geog Sci - (diss) "Marsh landscapes of Kalininskaya Oblast."
Yaroslavl', 1961. 20 pp; (Ministry of Education RSFSR, Yaroslavl'
State Pedagogical Inst imeni K. D. Ushinskiy); 250 copies; price
not given; (KL, 10-61 sup, 208)

S/051/62/013/001/002/019
E039/E420

AUTHORS: Neporent, B.S., Bakhshiyev, N.G., Lavrov, V.A.
Korotkov, S.M.

TITLE: The effect of medium on the properties of the
electronic spectra of complex molecules during the
gradual transition from vapour to solution

PERIODICAL: Optika i spektroskopiya, v.13, no.1, 1962, 32-42

TEXT: The position and width of absorption and fluorescent spectra
in 3-methylaminophthalimide are examined with change in
concentration of ether in the range from 0 to 58×10^{20}
molecules/cm³ during the transition from vapour to the liquid
phase, i.e. 220 → 20°C. It is shown that all the spectral
characteristics investigated change monotonically with
concentration of ether and that there is no sudden change during
the phase transition in the solvent. The results are fully
tabulated and are also shown graphically. The dielectric
constant changes from 1.0 at 220°C to 4.3 at 20°C while the
Card 1/2

The effect of medium ...

S/051/62/013/001/002/019
E039/E420

refractive index changes from 1.0 to 1.355. The peak of the absorption spectrum is displaced from $26.8 \times 10^{-3} \text{cm}^{-1}$ at 220°C to $25.2 \times 10^{-3} \text{cm}^{-1}$ at 20°C and the peak of the fluorescent spectrum is displaced from $23.0 \times 10^{-3} \text{cm}^{-1}$ to $21.1 \times 10^{-3} \text{cm}^{-1}$ for the same temperatures. The change in position and intensity of the absorption and fluorescent spectra is found to be in quantitative agreement with theory based on the assumption of internal fields. The dependence of the transition probability on temperature is determined with and without radiation and the intramolecular nature of the fluorescence extinction temperature is established. An estimate is made of the transfer of vibrational energy on collision between excited molecules and ether molecules. The accommodation coefficient is estimated to be 0.1 and the duration of collisions 3×10^{-11} sec. There are 7 figures and 1 table.

SUBMITTED: May 18, 1961

Card 2/2

LAVROV, V.A., doktor arkhitektury

Developing the layout of reconstructed cities. Izv.ASIA no.3:12-
24 '62. (MIRA 15:11)

(City planning)

LAVROV, Vitaliy Alekseyevich, doktor arkhitektury; FEDOROVA, T.N.,
red.

[City and its public center] Gorod i ego obshchestvennyi
tsentr. Moskva, Stroiizdat, 1964. 188 p. (MIRA 17:12)

ZOLOTAREVSKIY, D.B., inzh.; TARANETS, A.V., inzh.; LAVROV, V.A., inzh.

Welding 35GS reinforcement steel during the building of tower-type headframes in winter conditions. Shakht. stroi. 9 no. 12:
9-12 D '65. (MIRA 18:12)

1. Donetskii politekhnicheskii institut (for Zolotarevskiy).
2. Kombinat Donetskshakhtostroy (for Taranets, Lavrov).

L 44015-66 EWT(d)/EWT(m)/EWP(t)/ETI/EWP(h)/EWP(l) IJP(c) JD

ACC NR: AP6015122 (N) SOURCE CODE: UR/0064/66/000/005/0042/0044

AUTHOR: Furman, A. A.; Lavrova, V. B.

ORG: none

TITLE: Commercial production of titanium trichlorideSOURCE: Khimicheskaya promyshlennost', no. 5, 1966, 42-44TOPIC TAGS: titanium compound, ~~chloride~~ chemical reduction, silicon, ~~propylene, polymerization~~, polymerization catalyst, TRICHLORIDE

ABSTRACT: Conditions for reduction of titanium tetrachloride with silicon to form titanium trichloride were studied in the laboratory and translated to pilot operations. ²⁷ TiCl₄ vapors are passed through a reactor (900-1000°C) containing a silicon column. The product vapor mixture is cooled to 150-300°C to condense TiCl₃, then cooled further to condense SiCl₄ and TiCl₄. This mixture is distilled and the TiCl₄ is recycled. Product TiCl₃ is ground and the 5-8% of adsorbed TiCl₄ is evaporated under vacuum, giving a 98-99% pure TiCl₃ containing less than 0.5% TiCl₄ and less than 1% insoluble impurities. ²⁷ Optimum TiCl₄ feed rate through the laboratory 120 mm Si column is in the 48.5-125 cm³/ (cm².min) range. Increasing contact time did not increase conversion

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UDC: 661.882.321

L 44015-66

ACC NR: AP6015122

above about 17% $TiCl_4$. The system is operated under an oxygen- and moisture-free inert atmosphere. One commercial installation is already in operation. The product $TiCl_3$ is usable as a catalyst for olefin polymerization, especially for production of polypropylene. Orig. art. has: 3 tables, 1 figure and 3 equations. 0

SUB CODE: 07, 11, 13/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 010

Cord 2/2 LC

1. LAVROV, V. D., Eng.
2. USSR (600)
4. Machinery Industry
7. Advanced method of allotting materials in preliminary production. Vest mash No. 12 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

LAVROV, Vladimir Dmitriyevich; KASATKIN, S.S., inzh., retsenzent; POROKHIN, G.A., inzh., red.; EL'KIN, V.D., tekhn. red.

[Planning and recording experimental and research works in the manufacture of machinery] Planirovanie i uchet opytnykh i nauchno-issledovatel'skikh rabot v mashinostroenii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 142 p.
(MIRA 14:9)

(Engineering research)

LAVROV, V. I.

KREYNIN, R.G.; LAVROY, V.I.

Machining rolling mill rolls together with their blocks. Metallurg
no.12:26 D '56. (MIRA 10:1)

1. Starshiy master val'tsetokarnoy masterskoy (for Kreynin). 2. Briga-
dir slesarey sortoprokatnogo tsakha Chelyabinskiy metallurgicheskiy
zavod (for Lavrov).

(Rolls (Iron mills))

AUTHOR: Iavrov, V.I., in charge of fitter crews of the section-rolling shop at the Chelyabinsk Metallurgical Works. ²⁴²

TITLE: Packing for roll saddles of a 300-mill. (Uplotnenie podushek valkov stana 300.)

PERIODICAL: "Metallurg" (Metallurgist),
1957, No. 1, p. 30, (U.S.S.R.)

ABSTRACT: Eight vertical-roll bearings per month used to fail at one stand of the roughing train through defective design of the rubber-packing arrangement. After modifying the design, no bearing failures occurred for four months. The old and new designs are illustrated in this note.
1 drawing.

S/129/61/000/011/005/010
E071/E335

AUTHORS: Sachkov, V.V., Lavrov, V.I., Engineers and Potak, Ya.M., Candidate of Technical Sciences

TITLE: Steel X17H4AG9 (ЭИ878) (Kh17N4AG9(EI878) as a substitute for steels of the type 1X18H9 (1Kh18N9) and 1X18H9T (1Kh18N9T)

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 11, 1961, 30 - 33

TEXT: EI-878 (Kh17N4AG9) austenitic stainless steel (0.12% max C, 0.7 max Si, 8-10.5 Mn, 16-18 Cr, 3.5-4.5 Ni, 0.15-0.25 N, 0.020% max S and 0.03% max P) was developed a few years ago as a substitute for 18-8 type steels. In order to increase nitrogen solubility and prevent ingot growth it has a higher Mn content than AISI 201 steel. The structure of this steel remains fully austenitic; even after heating to 1 250 °C no formation of δ-ferrite at high temperatures or martensite at low temperatures was observed. The amount of α-phase formed by cold-working with reductions as high as 40% does not exceed 4%. The steel has good technological properties; its mechanical properties

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S/129/61/000/011/005/010
E071/E335

Steel

in the soft or hardened state as well as at elevated temperatures are superior to those of the steels 1Kh18N9 (AISI 302) and 1Kh18N9T (AISI 321). It has a satisfactory corrosion resistance in most moderately corrosive media, although its susceptibility to intercrystalline corrosion is somewhat higher than that of steel 1Kh18N9T. The replacement of steels 1Kh18N9 and partially of steel 1Kh18N9T by steel EI878 will permit reducing the weight of some parts and reducing the consumption of nickel by a factor of 2. ✓

There are 4 figures, 1 table and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The English-language reference mentioned is: Ref. 2 - R.A. Lula, W.R. Renshaw. "Metal Progress", v. 69, no. 2, 1956.

Card 2/2

SHOSTAKOVSKIY, M.F.; ATAVIN, A.S.; TROFIMOV, B.A.; LAVROV, V.J.

Kinetics of acido-catalytic hydrolysis of some substituted
1,3-dioxolanes. Izv. SO AN SSSR no.3:93-99 '65. (MIRA 18:8)

1. Irkutskiy institut organicheskoy khimii Sibirskogo
otdeleniya AN SSSR.